

SUPPORTING STATEMENT FOR  
INFORMATION COLLECTION REQUEST RENEWAL:

**"INFORMATION COLLECTION ACTIVITIES  
ASSOCIATED WITH EPA'S MOBILE  
AIR CONDITIONER RETROFITTING PROGRAM"**

EPA ICR No. 1774.03

24 June 2003

**1. IDENTIFICATION OF THE INFORMATION COLLECTION**

**1(a) Title and Number of the Information Collection**

This ICR is entitled "Information Collection Activities Associated with EPA's Mobile Air Conditioner Retrofitting Program," EPA ICR Number 1774.03, and OMB Number 2060-0350.

**1(b) Short Characterization**

In 1994, the Significant New Alternatives Policy (SNAP) Program was enacted, enabling the Agency to review available substitutes for ozone depleting substances (ODSs) and determine their acceptability. The Global Programs Division (GPD) is responsible for enacting regulations to phase out chemicals which damage the stratospheric ozone layer and therefore pose a threat to human health and the environment. Depletion of stratospheric ozone can result in sharp increases in melanoma and non-melanoma cancers due to increased exposure to ultraviolet-A (UVA) and ultraviolet-B (UVB) radiation, and a higher incidence of cataracts (a leading cause of blindness). Under the SNAP program, companies submit applications for review by the GPD. After all necessary information is received, GPD has 90 days to review the product data submitted, and determine if the substitute is acceptable, unacceptable, or if its use must be restricted. GPD is reviewing these substitutes for their impact on human health and the environment, looking at factors including ozone depleting potential, atmospheric lifetime, global warming potential, and flammability. Many substitutes are produced for multiple uses, and GPD must determine what uses are appropriate, and under what conditions. EPA does not evaluate the efficacy of the product to achieve the results the manufacturer intended. When GPD makes a decision that substitutes are acceptable, a Notice is published in the Federal Register listing them. If the substitute is found unacceptable or use restrictions are necessary, a notice-and-comment

rulemaking is necessary to impose those restrictions. The list of substitutes is cumulative, with revisions to the list made periodically. A comprehensive list of substitutes, their uses, and any relevant restrictions is maintained for distribution to interested parties.

GPD is requiring those retrofitting motor vehicle air conditioners to use a substitute refrigerant to provide some basic information on a label to be affixed to the air conditioner. The label will include information as to the substitute refrigerant, when and by whom the retrofit was performed, environmental and safety information about the substitute refrigerant, and other information. This information is needed so that other technicians will be able to service the equipment properly, decreasing the likelihood of significant refrigerant cross-contamination and potential failure of both air conditioning systems and recovery/recycling equipment.

EPA estimates that 87,000 technicians will be responsible for providing this information over the next 3 years, at a total cost (labor plus materials) of \$17,800,000.

## **2. NEED FOR AND USE OF THE COLLECTION**

### **2(a) Need and Authority for the Collection**

The SNAP program includes review of potential alternatives to ozone-depleting refrigerants used for air conditioning motor vehicles. With the phase out of chlorofluorocarbons (CFCs), and specifically CFC-12, GPD faces the challenge of identifying acceptable alternative refrigerants to allow consumers the choice to retrofit CFC-12 motor vehicle air conditioners to those alternatives. EPA notes that in the U.S., prior to the 1993 model year, most all motor vehicle air conditioners used CFC-12, and that after the 1995 model year, all new motor vehicles with air conditioners used HFC-134a. EPA estimates that there are currently approximately 33 million motor vehicle air conditioners, originally designed to use CFC-12, operating in the U.S. Of these, EPA estimates 3 million, or about 9%, will be retrofitted to use alternative refrigerants between October 1, 2003 and September 30, 2006 (the term of this ICR). The remaining air conditioners either (1) will continue to operate without service, (2) will continue to operate with minor service including refilling with available supplies of CFC-12, (3) will be disposed of along with the entire motor vehicle, (4) will cease to function but will not be retrofitted due to economic reasons, or (5) have already been retrofitted to an alternative refrigerant and will not be retrofitted again.

The purpose of this Information Collection Request (ICR) is to estimate the burden associated with the 40 Code of Federal Regulations (CFR) Part 82 requirement that service technicians label mobile air conditioners with information about new refrigerants when they retrofit a system. It is necessary to assess the time it will take for the service technician to fill out, sign, date, and place the label on the retrofitted air conditioner. This label will acknowledge that the retrofitting has been completed, and that the mobile air conditioner should no longer use CFC refrigerant. In addition, the labels provide essential information to technicians about the specific refrigerant used in the air conditioning system.

Section 612 of the Clean Air Act (CAA) requires EPA to promulgate rules making it unlawful to

replace any ozone-depleting substance with any substitute that the Administrator determines may present adverse effects to human health or the environment where the Administrator has identified an alternative that (1) reduces the overall risk to human health and the environment, and (2) is currently or potentially available. EPA is concerned that the existence of several substitutes in this end-use may increase the likelihood of significant refrigerant cross-contamination and potential failure of both air conditioning systems and recovery/recycling equipment. In addition, continuing the smooth transition to the use of substitutes strongly depends on the continued purity of the recovered, recycled and/or reclaimed R-12 supply.

## **2(b) Use and Users of the Data**

The purpose of the label is to alert service technicians and motor vehicle owners that the motor vehicle air conditioner has been retrofitted to use non-CFC refrigerant. The label will provide essential information to technicians about the specific refrigerant used in the air conditioning system. This information will assist the technician in avoiding service practices that might result in refrigerant cross-contamination and system failure. As the stores of CFC refrigerant are depleted, vehicles are being retrofitted to use alternative refrigerants.

## **3. NONDUPLICATION, CONSULTATIONS, AND OTHER COLLECTION CRITERIA**

### **3(a) Nonduplication**

The required label is put on CFC-12 air conditioners that are being retrofitted with an acceptable substitute. The label will be the only mechanism to indicate the use of a substitute, and therefore will not be duplicative.

### **3(b) Public Notice Required Prior to ICR Submission to OMB**

A Federal Register Notice making this supporting statement available for public comment was submitted for publication.

### **3(c) Consultations**

EPA consulted with the following individuals in preparing this ICR renewal:

- Ward Atkinson, Sun Test Engineering, 480-994-9299, regarding the number of air conditioners likely to be retrofitted, the number of technicians likely to be affected, and the cost burden.
- Tony Molla, National Institute for Automotive Service Excellence, 703-669-6600, regarding the number of technicians likely to be affected.
- Marian Martin Van Pelt and Katrin Peterson, ICF Consulting, 202-862-1200, regarding the number of air conditioners likely to be retrofitted.

### **3(d) Effects Of Less Frequent Collection**

This ICR asks for information to be collected just once per motor vehicle air conditioner retrofit.

### **3(e) General Guidelines**

This ICR follows all of OMB's general guidelines for information collections.

### **3(f) Confidentiality**

This ICR does not ask for any information that would be considered confidential.

### **3(g) Sensitive Questions**

This ICR does not ask any questions concerning sexuality, religious beliefs, or other matters usually considered private.

## **4. THE RESPONDENTS AND THE INFORMATION REQUESTED**

### **4(a) Respondents and SIC Codes**

The following is a list of Standard Industrial Classification (SIC) codes and associated industries that may retrofit a motor vehicle air conditioner and therefore may be affected by information collection requirements covered under this ICR:

551	New and used car dealers
554	Gas service stations
7532PT	Top and body repair shops
7538	General automotive repair shops
7539	Automotive repair shops not elsewhere classified, including air conditioning and radiator specialty shops

### **4(b) Information Requested**

The Agency will not standardize the label, but rather allow the industry to devise a format that accommodates information about the refrigerants on the market. Unique fittings are necessary for different refrigerants in order to avoid cross contamination, as is the use of different colored labels for each refrigerant. EPA will work closely with refrigerant developers to eliminate the risk of duplication. The person conducting the retrofit must apply to the air conditioning system in the engine compartment a label that contains the following information:

- The name and address of the technician and the company performing the retrofit.
- The date of the retrofit.
- The trade name, charge amount, and, when applicable, the numerical designation of the refrigerant as determined under the latest version of Standard 34 of the American Society of Heating, Refrigerating, and Air-conditioning Engineers (ASHRAE), Inc..

- The type, manufacturer, and amount of lubricant used.
- If the refrigerant is or contains an ozone-depleting substance, the phrase "ozone depleter".
- If the refrigerant displays flammability limits as measured according to latest version of Standard E681 of the American Society for Testing and Materials (ASTM) International, the statement "This refrigerant is FLAMMABLE. Take appropriate precautions."

## **5. THE INFORMATION COLLECTED – AGENCY ACTIVITIES, COLLECTION METHODOLOGY, AND INFORMATION MANAGEMENT**

The Agency will not develop a format for the label and will not collect and compile the information provided on the label.

## **6. ESTIMATING THE BURDEN AND COST OF THE COLLECTION**

### **6(a) Estimating Respondent Burden**

EPA will not develop a standard label, but rather the manufacturers will have the opportunity to produce unique labels to accompany their refrigerant. Much of the information required on the labels can be printed with the labels, thereby lessening the burden on the individual service shops, many of which are small businesses. These labels may also contain information about the specific fittings the service technician should use, with the subject refrigerant, to minimize the potential for cross-contamination when the system is serviced at a later date. We will work closely with industry in carrying out these labeling requirements, because there are several manufacturers who have alternative refrigerant products on the market. Proper labeling will result in considerable savings to industry and the public, since it will greatly reduce the chance of refrigerant contamination. There are now 15 alternative refrigerants on the market listed under the SNAP program as acceptable replacements for CFC-12 for mobile air conditioning. Considerable costs would accrue if refrigerants were contaminated (mixed), including the costs to repair systems which failed as a result and the costs to recover, separate, reclaim and/or dispose of contaminated refrigerant.

To estimate the total number of retrofits to occur by September 30, 2006, the date this ICR will expire, the Agency analyzed publicly available data for vehicle sales in the U.S. The U.S. Department of Transportation, Federal Highway Administration, Office of Highway Policy Information website provided vehicle sales from 1970 through 2000, citing Ward's 2001 as the source. EPA assumed that the penetration of air conditioning in these cars rose linearly from 70% in 1970 to 98% in 1998 and remained at 98% thereafter. EPA assumed that 100% of the air conditioners were designed for CFC-12 for years 1970 through 1991, 67% for 1992, 33% for 1993, and 0% thereafter. EPA assumed the lifetime of service of an air conditioner follows a Poisson distribution with an average lifetime of 12 years. Using this method, EPA estimates that there are currently approximately 33 million motor vehicle air conditioners, originally designed to use CFC-12, operating in the U.S. Of these, EPA estimates 3 million, or about 9%, will be retrofitted to use alternative refrigerants between October 1, 2003 and September 30, 2006 (the

term of this ICR). The remaining air conditioners either (1) will continue to operate without service, (2) will continue to operate with minor service including refilling with available supplies of CFC-12, (3) will be disposed of along with the entire motor vehicle, (4) will cease to function but will not be retrofitted due to economic reasons, or (5) have already been retrofitted to an alternative refrigerant and will not be retrofitted again.

The U.S. Department of Labor statistics indicate there are 168,630 automotive body and related repairers (Standard Occupation Classification [SOC] System Code Number 49-3021) and 701,150 automotive service technicians and mechanics (SOC Code Number 49-3023) in the U.S. EPA estimates that 87,000 of them, or approximately 10% of the total, will be responsible for retrofitting the estimated 3,000,000 motor vehicle air conditioners. EPA estimates the time to complete and apply the label at 5 minutes per motor vehicle air conditioner, making the total burden 250,000 hours. At an estimated average labor rate of \$70 per hour, the overall cost associated with the burden hours is \$17,500,000. The cost for designing, typesetting, printing and distributing 3,000,000 labels is estimated to be \$300,000 (\$0.10 per label). Adding the labor and capital costs together yields a total cost burden of \$17,800,000.

#### **6(b) Burden Statement**

The annual public reporting and record keeping burden for this collection of information is estimated to average 0.083 hours (5 minutes) per response (i.e., to fill out the information required on the label and affix it to the air conditioner). Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency. This includes the time needed to review instructions; develop, acquire, install, and utilize technology and systems for the purposes of collecting, validating, and verifying information, processing and maintaining information, and disclosing and providing information; adjust the existing ways to comply with any previously applicable instructions and requirements; train personnel to be able to respond to a collection of information; search data sources; complete and review the collection of information; and transmit or otherwise disclose the information.

To comment on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including the use of automated collection techniques, EPA has established a public docket for this ICR under Docket ID No. OAR-2003-0097, which is available for public viewing at the Air and Radiation Docket in the EPA Docket Center (EPA/DC), EPA West, Room B102, 1301 Constitution Ave., NW, Washington, DC. The EPA Docket Center Public Reading Room is open from 8:30 a.m. to 4:30 p.m., Monday through Friday, excluding legal holidays. The telephone number for the Reading Room is (202) 566-1744, and the telephone number for the Air and Radiation Docket is (202) 566-1742. An electronic version of the public docket is available through EPA Dockets (EDOCKET) at <http://www.epa.gov/edocket>. Use EDOCKET to submit or view public comments, access the index listing of the contents of the public docket, and to access those documents in the public docket that are available electronically. Once in the system, select "search," then key in the docket ID number identified above. Also, you can send comments to the Office of Information and Regulatory Affairs, Office of Management and Budget, 725 17th

Street, NW, Washington, DC 20503, Attention: Desk Office for EPA. Please include the EPA Docket ID No. (OAR-2003-0097) and OMB control number (2060-0350) in any correspondence.